

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Docket No: Q54404

Group Art Unit: 1743

Examiner: Ta Hsung Tung

In re application of

Kaname MIWA, et al.

Appln. No.: 09/313,184

Confirmation No.: 3561

Filed: May 18, 1999

For: S

SENSOR ELEMENT AND GAS SENSOR

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §§ 1.97 and 1.98

Commissioner for Patents Washington, D.C. 20231

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) form and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

One copy of each of the listed documents is submitted herewith. These documents were cited in an Office Action dated February 24, 2003 in a corresponding Japanese patent application.

The present Information Disclosure Statement is being filed after either a Final Office Action, Notice of Allowance, or an action that otherwise closes prosecution in the application (whichever is earlier), but before payment of the Issue Fee, and therefore Applicant is submitting herewith a check for the fee of \$180.00 under 37 C.F.R. § 1.17(p), and a Statement Under

37 C.F.R. § 1.97(e). The USPTO is directed and authorized to charge all required fees, except MHEKONEN 00000035 09313184

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INFORMATION DISCLOSURE STATEMENT

U.S. Appln. No.: 09/313,184

for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account. A duplicate copy of this paper is attached.

In compliance with the concise explanation requirement under 37 C.F.R. § 1.98(a)(3) for foreign language documents, Applicant submits the following explanations:

U.S. Patent 5,348,630 (of record) corresponds to Japanese Patent Application laid-open Nos. 2-147853 and 2-147854.

JP 61-97754 discloses a type of sensor having a pair of electrodes formed on opposite sides of an oxygen-ion conductive solid electrolyte substrate, but not a flat limiting-current-type sensor. In a corresponding Japanese patent application, the Japanese Examiner cited JP 61-97754 as disclosing that the area of the negative electrode differs from the area of the positive electrode, thereby lowering the element resistance of the flat limiting-current-type sensor and thus improving measurement accuracy. However, the sensor in JP 61-97754 is not a flat limiting-current-type sensor.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any

INFORMATION DISCLOSURE STATEMENT

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listed document as a competent reference against the claims of the present application.

Respectfully submitted,

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PATENT TRADEMARK OFFICE

Date: April 4, 2003

Abraham J. Rosner Registration No. 33,276 GROUP TOO

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STATEMENT UNDER 37 CFR § 1.97(e)

Commissioner for Patents Washington, D.C. 20231

Sir:

The undersigned hereby states, upon information and belief:

That each item of information contained in the Information Disclosure Statement filed concurrently herewith was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of said Information Disclosure Statement.

Respectfully submitted,

Abraham J. Rosner

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PATENT TRADEMARK OFFICE

Date: April 4, 2003